

PATENT CLAIMS

1. A cable connection system, comprising a contact body (11, 28, 31, 32) which has first means (18, ..., 27) on a cable connecting side for the purpose of producing a releasable electrical and mechanical connection with the end of a cable (30) and is designed on a contact side for the purpose of providing an electrical contact, in particular a plugging contact, the first means comprising an essentially rotationally symmetrical, central clamping element (21), which is integrally formed on the contact body (11, 28, 31, 32) and tapers along an axis (33) towards the cable end, and a clamping sleeve (23) which concentrically surrounds the clamping element (21), can be screwed to the contact body (11, 28, 31, 32) in the axial direction and has an inner, essentially rotationally symmetrical clamping contour (20; 20a, 20b; 20'; 20a', 20b') such that, when the clamping sleeve (23) and the clamping element (21) are screwed together, a stranded wire (29), which is inserted into the intermediate space between the clamping element (21) and the clamping contour (20; 20a, 20b; 20', 20a', 20b'), of a cable (30) to be connected is clamped, characterized in that the clamping element is in the form of a clamping cone (21), in that the clamping contour (20, 20') comprises a first section (20a, 20a') in which the limiting face of the clamping contour (20, 20') extends approximately parallel to the cone face of the clamping cone (21), and in that the clear width (w) of the clamping sleeve (23) in the region of the clamping contour (20, 20') is smaller than the maximum outer diameter of the clamping cone (21).

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2. The cable connection system as claimed in claim 1, characterized in that the limiting face of the clamping contour (20) in the first section (20a) extends parallel to the cone face of the clamping cone (21).

3. The cable connection system as claimed in claim 1, in that the limiting face of the clamping contour (20') has a slightly rounded section in the first section 5 (20a').

4. The cable connection system as claimed in one of claims 1 to 3, characterized in that a thread region (18) is arranged on that side of the clamping cone (21) 10 which faces away from the cable (30), for the purpose of screwing on the clamping sleeve (23), and in that a first recess (19) is provided between the thread region (18) and the clamping cone (21) for the purpose of accommodating the stranded wire (29).
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5. The cable connection system as claimed in one of claims 1 to 4, characterized in that at least one viewing hole (24) is provided in the clamping sleeve (23), it being possible to visually check the insertion 20 of the stranded wire (29) into the clamping zone between the clamping cone (21) and the clamping contour (20, 20') through said viewing hole (24).

6. The cable connection system as claimed in claim 5, 25 characterized in that two opposite viewing holes (24) are provided in the clamping sleeve (23).

7. The cable connection system as claimed in one of claims 1 to 6, characterized in that a marker recess 30 (27) is arranged on that side of the clamping cone (21) which faces away from the cable (30), it being necessary for the clamping sleeve (23) to be screwed onto the contact body (11, 28, 31, 32) up to this 35 marker recess (27) before the stranded wire (29) of the cable (30) is inserted into the clamping zone between the clamping cone (21) and the clamping contour (20, 20').

8. The cable connection system as claimed in one of claims 1 to 7, characterized in that widths across the flats (17, 17', 25) are provided on the contact body (11, 28, 31, 32) and on the clamping sleeve (23) for 5 the purpose of tightening the screw connection with a defined torque.

9. The cable connection system as claimed in one of claims 1 to 8, characterized in that the contact body 10 (11, 28, 31, 32) and the clamping sleeve (23) are produced from metal.

10. The cable connection system as claimed in claim 9, characterized in that the contact body (11, 28, 31, 32) 15 and the clamping sleeve (23) are produced from brass and are provided with a silver plating on the surface.

11. The cable connection system as claimed in one of claims 1 to 10, characterized in that the contact body 20 is in the form of a socket (10, 32) or a plug (31) on the contact side.